Mr. Chamberlin previously spent six years doing mechanical design for IBM advanced technology development, and understands CAD-CAM systems and the manufacturing and design environment. He holds a certification in computer aided manufacturing design.

EDUCATIONAL AND PERSONAL HISTORY

Bachelor of Mechanical Engineering - New Mexico State University - 1979.
Graduate work in Mechanical Engineering - New Mexico State University - 1979-1980.
Graduate work in Electrical Engineering - Arizona State University - 1981-1982.
Graduate work in Reliability Engineering - Arizona State University - 1984-1985.
IBM Marketing Education training and IBM Systems Engineering training 1986 to present.
Community College classes in architecture and html programming.

Mr. Chamberlin enjoys sailing, scuba diving, 4-wheeling, camping, and woodworking.

Charlie Arteaga

PROFESSIONAL PROFILE

Mr. Charlie Arteaga specializes in the design, installation and troubleshooting of heterogeneous multi-vendor Local and Wide Area Network environments. With more than sixteen years of hands-on experience in designing, installing and diagnosing ATM, FDDI, Ethernet, Gigabit Ethernet and Token-Ring networks, his current focus centers around assessing existing networks, as well as, designing and implementing complex high-speed network environments to support the ever increasing end-user demand for bandwidth and universal access to all network resources.

Charlie is currently working on the American Express Global Cisco Network rollout in Phoenix, where he is the technical lead for the main data center infrastructure uplift to a Cisco Gigabit Ethernet environment. The new network design includes a complex array of high performance Gigabit Ethernet switches, which are replacing lower performance hubs and switches.

Among other recent projects Charlie worked on, was the conversion of the corporate headquarters of a large utility company in Dallas from Token-Ring to a Gigabit Cisco Backbone and Ethernet infrastructure. The core consisted of six Gigabit switches connecting to over 60 access switches. Also, Charlie performed as one of the lead network engineers for final design, implementation and workstation cutover to a new Cisco network at USAA Insurance in San Antonio. This network implementation included over fifty high-speed Cisco LS 1010 ATM switches for the campus backbone and over 1,000 Cisco Catalyst 5000 Workgroup switches. It represented one of the largest networks of its kind at the time, supporting over 25,000 switched Fast Ethernet connections to the desktop.

PROFESSIONAL WORK EXPERIENCE

5/00 – Present

Technical Lead for IBM Global Services performing a Network uplift at the Main Data Center at American Express in Phoenix, Arizona. Activities in this project included:

- Develop a detailed infrastructure design for the Main Data Center
- Develop a migration strategy for the legacy environment to the high performance Gigabit Ethernet backbone infrastructure
- Implement the new infrastructure in parallel to the existing one
- Provide lead consulting role for Technical Leads at other Amex sites for LAN design and architecture issues
- Implement a phased approach for transition from old to new infrastructure
- Migrate users and servers to new infrastructure (in progress)

12/99 – 4/00

Technical Lead and Project Manager for IBM Global Services performing a Network Upgrade from Token Ring to Gigabit Ethernet at the Corporate Headquarters of Texas Utilities in Dallas, Texas. Activities in this project included:

- Develop an upgrade and migration strategy for the legacy Token Ring to a high performance Gigabit Ethernet backbone infrastructure
- Develop a detailed design and perform benchmark testing in a lab environment
- Implement the new infrastructure in parallel to the existing one
- Successfully migrate users to new infrastructure
- Document design and produce detailed drawings

4/99 - 11/99

Senior Network Engineer for IBM Global Services performing various Short-Term projects at different customer locations. Activities included:

- Assess current WAN Access infrastructure for the Government of the District of Columbia Tax office in Washington D.C.
- Provide recommendations for an improved WAN design supporting redundancy and quick fail-over for the Tax Office
- Assess the planned Web infrastructure for Hallmark Cards in Kansas City and provide recommendations for best and most cost-effective approach for implementation
- Assess a point of sale design for Fleming Foods in Oklahoma City and provide recommendations for implementations at sites across the country
- Troubleshoot network for Express Personnel Services in Oklahoma City and provide recommendations for corrective measures
- Upgrade router software for small bank in Georgetown

11/98 - 3/99

Senior Network Engineer for IBM Global Services performing a Network Assessment for Gates Rubber Company in Denver, Colorado. Activities in this project included:

- Assess current Host Access methodology and it's network performance
- Develop an upgrade and migration strategy for a legacy SNA Gateway environment to a Year 2000 compliant platform
- Successfully implement a fully functional prototype on the Gateway platform (Netware 4.11 with SAA 3.0) with full CPIC application support for customer developed Transactor applications

- Migrate a customer developed CPIC application to the new Gateway platform and configure all required LU 6.2 definitions

- Reprogram and recompile CPIC C code developed by the customer to run on the CPIC 2.0 compliant new SAA Gateway platform

5/97 - 9/98

Senior Network Engineer for IBM Global Services supporting ATM Network Rollout at USAA Insurance in San Antonio, Texas. Activities in this project included:

- Develop final design for implementation for Information Highway Project (IHP)

- Architect ATM addressing scheme to be used in USAA IHP project

- Install, configure and troubleshoot Cisco ATM Routers, Lightstream 1010 and Catalyst 5000 Distribution switches for USAA's Information Highway Project

- Setup and troubleshoot Lan Emulation Services for ATM on Cisco Catalyst 5000

- Setup various test scenarios including Printing, Network Servers etc in Lab area for eventual production implementation in ATM environment at USAA

- Troubleshoot and maintain Channel Interface Processors for SNA ESCON Host connectivity on CISCO 7507 and 7513 Routers.

11/96 - 4/97

Network Analyst for IBM Availability Services Mentoring Team, Dallas, TX.

- Support Customers in optimizing/troubleshooting their Network Environments

- Assist Availability Services Field Personnel with integration of Multivendor Non-IBM Network Hardware and Systems (Such as Cisco Routers, Cabletron and Bay Networks Hubs, etc.)

1/95 - 10/96

Senior LAN Administrator/LAN Manager for Citicorp United States Service Center, San Antonio, TX.

- Manage a team of six highly skilled LAN Administrators

- Support a 1,800 Node Network in a multivendor, multiprotocol environment including Novell 3.12 and 4.11, Windows NT workstation and server, Appleshare servers, 800+ X-Server clients running on MAC and Intel platforms, Netware SAA 1.3, 2.0 and 3.0 and IRMALAN 3270 Gateways, Cabletron Concentrators, CISCO 7000 and 7513 routers, FDDI and 10 BaseT cabling plant

- Maintain and troubleshoot WAN connectivity to multiple sites

- Review and implement engineering designs for infrastructure expansions

- Manage and troubleshoot network infrastructure for this site, including use of Distributed Sniffers, Netview network management system, Novell NMS, cable scanners, FDDI sniffers, etc.

- Coordinate Network expansion projects for business units at this site

- Manage and coordinate Change Control Process for Network infrastructure and system changes

- Support a wide variety of desktop applications

11/87 - 12/94

Senior Network Analyst for NETCON, INC., Austin, TX.

- Design and implement LAN and WAN networks for customer base, including routers, DSU/CSU's, fileservers and network infrastructure

- Maintain and troubleshoot large networks with Network protocol analyzers and diagnostic software

- Assist clients with setup and expansion of Networks including many software applications

4/85 - 10/87

Customer Service Manager for MRW Austin PC Specialist, Austin, TX.

- Manage service operation for MRW - 6 Technicians
- Train and supervise technicians
- Design, configure and install Novell Networks
- Train Customers on use and administration of their networks

9/82 - 9/84

Customer Service Manager for ComputerLand of College Station, Texas.

- Manage Service Department - 2 Technicians
- Install New Computer Systems
- Repair and maintain computers, printers and small networks
- Educate sales staff on technical issues
- Train customers on use of hardware and software for systems they purchased

PROFESSIONAL EDUCATION

B.S. in Computer Technology
University of the State of New York

Cisco Training and Certifications

Cisco CCIE Certification (July 00)
Cisco CCNP Certification (July 00)
Cisco Networker Conference 00
Cisco Networker Conference 98
Cisco ATM Solutions
Cisco Internetwork Troubleshooting
Cisco Channel Interface Processor
Cisco Advanced Router Course
Cisco Stratacom IGX
Cisco Catalyst 5500 Switch
Cisco 3640 APPN and IP configuration

IBM Training and Certifications

IBM Certified IT Specialist (November 99)
Professional Consulting Workshop
Networking Methodology Workshop
IBM Multivendor Networking Class
Hands-on Bridges, Routers, Switches Course

Network General Training (Sniffer)

Network Baselining and Analysis Course
Ethernet and Token-Ring Analysis and Troubleshooting
Troubleshooting with the Expert Sniffer Network Analyzer

Novell Training and Certifications

Novell Brainshare 97 Conference
Certified Novell Engineer (CNE)
Certified Novell Instructor(CNI)
    for Novell LANalyzer network protocol analyzer
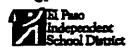   and NOVELL LANtern Network Management System

ENTERPRISE CERTIFIED NETWARE ENGINEER

MASTER CERTIFIED NETWARE ENGINEER

Infrastructure and Advanced Access

Other Languages

- German
- Spanish
- French

Scott Trent Fitz

PROFESSIONAL PROFILE

Mr. Trent Fitz has been with IBM since June, 1998. During this time, Trent has focused mainly on refining his skills in the design and integration of data and voice networking technologies. He has broad experience configuring Cisco routers, ATM switches, and various other networking devices. He also has extensive knowledge in LAN emulation, voice over ATM, and numerous networking protocols including OSPF, EIGRP, IP, IPX, and Appletalk. Trent is well versed in many other networking functions such as DNS and DHCP.

SIGNIFICANT ACCOMPLISHMENTS/PROFESSIONAL EXPERIENCE

Trent has been dedicated to one project since starting with IBM. The project involves the implementation of a large scale ATM network for a major Texas school district. Trent played a major role in the configuration and implementation of the network electronics, as well as in the design of several parts of the network. Trent worked extensively with the client and subcontractors to design and implement synchronous voice over ATM.

Trent has configured Cisco 7200 Routers, over 70 Cisco LightStream 1010 ATM switches, over 50 Cisco Catalyst 5000 ATM/Ethernet edge devices, and more than 200 Cisco Catalyst 1900 switches for rollout. This experience has provided Trent with the tools to skillfully and efficiently troubleshoot in this type of environment. He has implemented LAN emulation, configuring LECs, LECSs, and LESs using various methods for over 200 ELANs.

Trent has assisted in various network design issues, including synchronous clocking, LANE domains, IP addressing, DHCP implementation, and Appletalk implementation. Many times, resolving these issues required working closely with the client, determining the best solution for client needs.

EDUCATION AND PERSONAL HISTORY

Trent graduated in May, 1998 with a Bachelor of Science in Computer Engineering from the University of Oklahoma. He was on the Dean's honor roll in 1995, 1996, and 1997, and was on the President's Honor Roll in 1995. He was a member of the Institute of Electrical and Electronics Engineers and the Society of Computer Scientists. Trent, along with one partner, was awarded Top Ten honors in a national Motorola 6812 Microcontroller design contest.

Since joining IBM, Trent has successfully completed Cisco Voice Over Frame Relay, ATM, and IP, Introduction to Cisco Router Configuration, Advanced Cisco Router Configuration, and Designing Cisco Networks. These courses have greatly increased Trent's networking knowledge, complementing his experience on the job.

Bob McKim

PROFESSIONAL PROFILE

Mr. Robert McKim has twenty-one years experience with IBM in the Systems Engineering, Program Support and Customer Engineering fields. He is currently assigned as a Senior I/T Specialist with the Area 5 IT Consulting & Implementation Services in the Networking Practice. Mr. McKim has extensive experience in the design, implementation and maintenance of LAN's (token ring and Ethernet) and WAN's (Frame Relay, 56K(64K) and T1). Mr. McKim is also very experience in working with network operating systems on Intel based servers (Netware, IBM LAN Server and NT) and Intel based workstation operating systems (DOS, Windows, Win9x, NT and OS/2). In addition, Mr. McKim has very strong background in communications protocols (SNA, TCP/IP, NetBios etc.) on local area and wide area networks. His hardware knowledge and experience includes routers, hubs, switches, multiprotocol concentrators and FRADS. Mr. McKim also has experience with MVS, MVS/XA, ESA, OS-390, VM, VTAM, NCP and connectivity with HP, DEC, SUN and AIX. Mr. McKim was certified as a Novell CNE in 1991 and as a LAN Doctor Partner in 1993.

PROFESSIONAL EXPERIENCE

- Design, implementation and support (2+ years) of a large multi-protocol network for a state government utilizing IBM and Cisco routers.

- Assisted in the design and implementation of a large (2000+ workstations token-ring LANs at a manufacturing customer.

- Design and implementation of a complex SNA wide area network for a large transportation customer.

- Design and implementation of a complex multi-protocol network for a large manufacturing customer utilizing 2217's.

- Multiple engagements in local area and wide area problem determination and problem resolution.

- Multiple engagements in design and implementation of token ring and ethernet LANs.

- Multiple engagements in design and implementation of routed networks.

- Experience with IBM, DEC, SUN, HP, Apple and Novell connectivity issues.

AREAS OF EXPERTISE

- Senior IT Specialist - Networking Practice

- Design, implementation and support of Local and Wide area networks.

PROFESSIONAL BACKGROUND

- Mr. McKim was hired as a Customer Engineer in 1979. His territory included 3270 subsystems, 8100 accounts, Point of Sale systems, banking systems and remote entry systems (3770, 3730, 2790 and 1050).

- In 1985 he became a Program Support Representative, supporting the MVS, MVS/XA, VTAM and NCP software products.

- Mr. McKim was promoted to Operations System Engineer with the Marketing and Sales division in 1987. He provided support to the U.S. West, ConAgra and Commercial Federal accounts in the System Engineer role. In addition, Mr. McKim also provided software support to other accounts across the territory of the Omaha branch office.

- Concurrent with the announcement of the IBM PS/2 line in 1987 Mr. McKim became the branch office designated workstation specialist.

- Mr. McKim was assigned to the Union Pacific team in 1988 and was promote to Account Systems Engineer in 1989. He was responsible for workstation and networking. He continued to provide workstation specialist support skills across the Omaha branches.

- In 1991 Mr. McKim joined the Central Plains Trading Area Technical Support Unit. He provided workstation, operating systems and LAN support across a four state area for both marketing and technical issues

- Mr. McKim joined the Nebraska Availability Center as a Networking Services Specialist in 1993. He was promoted to Advisory Services Specialist in 1994.

- Mr. McKim joined the Area 5 Networking Practice as a Senior I/T Specialist in 1997.

Steven C. Beckman

Steve Beckman, an IBM Network Consultant in the IBM Global Services organization, specializes in connectivity and network management issues related to Local Area Networks (LANs) and multi-protocol Wide Area Networks (WANs) including Frame Relay and Cisco routers. Mr. Beckman has been involved in the design, management, and implementation (including physical installation) of networking projects for both large and small organizations for many years including numerous health care, communications, manufacturing, banking, and government industries.

Steve's latest project is in the banking industry as a network consult for providing the technical assessment potential e-business partners and proceeding to architect and negotiate the detailed solution to an extranet B2B secure solution for data exchange. The solution included Cisco routers configured with Firewall VPN authentication/encryption over Frame Relay with alternate ISDN path. After assessing dial, SNA, and TCP/IP solutions and various file transfer possibilities, IBM MQSeries from AS/400 to MVS was determined to provide superior application level communications. The application is tied with the functionality of internet web services to customer clients and extends the customers offering through B2B functionality.

Steve has been responsible for several significant projects within the last twelve months: A national Frame Relay and voice network was converted with minimal disruption and resulted in significant savings to the customer. Several opportunities have involved Steve's expertise as he provide enhanced LAN/WAN network designs to provide a scheme to allow a business partner to use the customer national WAN as a secure transport from shared office space to obtain access to the partners headquarters servers. This design included tunneling, policy routing, and packet firewall techniques to keep two networks separate and deliver a business function.

Steve produced an architecture and design for sophisticated enhancements to the customer's internet environment to add many desired attributes to their e-business transactions and internet access. VLAN switching was introduced to the DMZ to provide better isolation for various internet applications. Security enhancements were designed to allow for intrusion detection and the network and system level. Vulnerability assessments were also added to key systems and network level assessment capability. The architecture lays plans for enhancing availability through several design points: adding web server load balancing, duplicate Cisco switches, parallel inside routers, hot-sync'ed firewall backup, and multiple ISP connections using BGP. The product selection continued the customer expertise in FireWall-1 and added ISS security to internet and intranet components.

Other projects include the assessment of the customer mobile employee efficiency from a technical perspective. The consulting engagement analyzed the habits and needs of the mobile and home office employees. Many recommendations for enhanced productivity were provided. Integrated use of hand held devices for sales representatives, VPN

connectivity to close obvious security exposures, document and customer relations management areas for improvement, and wireless and basic voice functions to improve efficiency. Hand held devices are now in use, VPN trials are completed and moving towards a total mobile/SOHO solution.

Most recently, Steve is providing the leadership for a Tivoli implementation which he architect to enhance several network management applications. The architecture supports up to 1000 End Point devices and will provide Distributed Monitoring, System Inventory, User Administration, Security Management, TEC event correlation alerts, and other point solutions such as Microsoft Exchange Management and MQSeries Monitoring.

Steve has provided national roll out services for a large project by setting up a staging area for Cisco Catalyst 5500 switch, Cisco 3640 router, HP hubs and cable preparation into install kits for field installation personnel. The process was set up to provide detailed documentation that was hybrid to allow the staging technicians to configure and test equipment, prepare labeled cables, and ship to installers using the same documentation for construction. The same documentation was preferred for ongoing corporate operations.

Within the last few years, Steve designed and implemented new Frame Relay networks for national health care support of 40,000 physicians at hospitals around the country. Also, he implemented Motorola FRAD equipment for a proprietary ASYNC dial network resulting in reduced cost and improved performance. In related assignments, Steve provided numerous application-level gateways with connectivity to the many systems found in health care.

Steve has worked in many areas over time to have a well rounded IT background to include working as a systems engineer on MVS and VM systems with emphasis on IMS databases, VTAM/NCP networking to SNA devices and transition though the growth of Token Ring and Ethernet LANs.

He also has extensive teaching experience going back to radio relay systems evaluation and token ring management through Host Netview and LAN agents.

Mr. Beckman received a Master of Science from the University of Colorado in Electrical Engineering and a Bachelor of Science in Electrical Engineering from Colorado State University.

Tamara Boose, MCSE, CNE

PROFESSIONAL PROFILE

Ms. Boose is an Associate Consultant with IBM's Enterprise Services for Microsoft Technologies Practice in the Dallas-Fort Worth Metro area. She is skilled in analysis, design, implementation and support of heterogeneous operating system environments utlilizing Windows NT, NetWare and OS/2. Ms. Boose acquired her experience working with clients in the finance, securities and health provider industries. Her most current project experience includes large-scale application deployments and Y2K readiness coordination.

PROFESSIONAL EXPERIENCE

Instrumental in configuration, testing and documentation of an Active Directory/Exchange 2000 test lab for a NT4/Exchange 5.5 migration. Experience in building and configuring Active Directory domain controllers including services such as DHCP, DNS, DFS and RIS. Performed application certification on the Windows 2000 Professional platform including standard Microsoft products as well as client-specific and specialty applications. The successful deployment of Active Directory and Exchange 2000 in the production environment resulted in the client qualifying for a substantial savings in Microsoft Exchange licenses through Microsoft's early deployment program.

Participated in a server replacement project requiring installation and configuration of NT4 file servers, Exchange 5.5 servers, PDC and BDCs, as well as services such as DHCP, DNS and WINS. Reconfigured Exchange environment to split student and staff mailboxes between two servers. Built standard NT4 workstation image based on customer requirements. Provided training to customer on standard build and image process. Installed and configured a Windows 2000 "discovery lab" including Active Directory domain controllers, member servers, DHCP and DNS.

Ms. Boose led teams in several large and medium scale field deployments for a major financial services company. Projects included PeopleSoft software package deployment, DHCP services implementation, as well as Y2K compliance coordination for all Intel-based servers and desktops. Ms. Boose's role was as project lead for deployment including developing deployment methodologies, coordinating contract and internal support personnel and providing reporting mechanisms to internal and external auditors. She successfully completed projects within extremely limited time frames and limited resources resulting in major benefits to the company including a highly successful FDIC Y2K audit of the company's bank.

Ms. Boose participated as a team member in a project engineering group responsible for designing, configuring and implementing custom server-based application and storage solutions for internal corporate customers. Projects included deploying NT 4.0 application server solutions, designing disaster recovery processes for a three tier OS/2 Warp Server system, and NetWare 4.11 server deployments. Ms. Boose worked with

members of the team to complete all phases of these projects including business needs analysis, project scope development, solution design, hardware build, testing, customer acceptance and production implementation.

Ms. Boose served as a team member during an enterprise-wide conversion of a NetWare 4.1 environment to a Windows NT 4.0 Server environment for a major credit card services company. Ms. Boose was primarily responsible for creating daily, weekly, and monthly audit and compliance reports and procedures for the current and future environments using BindView EMS and Access databases. These tools were the primary source of reference for the creation and verification of the new environment. After a devastating flood, Ms. Boose had a role in the replacement and reconfiguration of more than 200 Windows NT workstations over a three day period.

Ms. Boose has also served as an instructor of a NetWare-based curriculum for a third-party computer education company. Ms. Boose presented daily lectures, prepared lesson plans, lab assignments and testing materials for adult students seeking to upgrade skills or retrain for career advancement and was instrumental to students' obtainment of CNE 4.1 certification. Ms. Boose aided in the installation of a WAN for a medical imaging company in an effort to centralize billing and scheduling activities. Ms. Boose's roles included coordinating cabling, data line, application server and hardware installations as well as user administration for Citrix Winframe/NT servers and file server administration in addition to providing support for all data lines, and communications equipment.

Ms. Boose assisted during an upgrade/standardization of a custom workstation client system for the nationwide branch offices of a major financial securities firm. The project involved the design, implementation and support of a custom server-based software distribution system for over 80 remote NetWare servers and 1100 users and included a major conversion of HP SCO Unix servers to a NetWare 3.12 environment. Stabilization of the branch environment lead to an increase in branch trading activity to levels approaching 20% of the company's total. Ms. Boose was also responsible for developing and testing distribution systems and tools, DCA and SNA gateway load balancing and user administration as well as providing third level support for the custom workstation client.

EDUCATIONAL BACKGROUND

Ms. Boose has the following education and background experience:

- Earned her Bachelor of Architectural Engineering degree from The Pennsylvania State University in May of 1991.

- Achieved **CNE** certification in August of 1994

- Completed her **Microsoft Certified Systems Engineer (MCSE)** certification in 1999

- Windows 2000 MCP.

Charles A. Reinehr

Mr. Reinehr is a Senior Consultant in the IBM Global Services Security and Privacy Services practice. Mr. Reinehr has over twelve years of experience in the information systems industry. He has extensive experience in mainframe and client-server application development using relational databases. He has managed an IS department, and has been the project leader on numerous application development projects. Recent activities have included security architecture and assessment work for the 2000 Olympic Games in Sydney, Australia.

- A large Software Development Company. Performed an application security assessment of a large e-commerce software application. Recommended specific actions to remove or mitigate security exposures discovered during the engagement.

- An Internet and Telephony Integration Company. Performed an Application Security Assessment for a new application being deployed on the Internet. Recommended specific actions to remove or mitigate security exposures discovered in the application architecture.

- A State Government Agency. Managed an Internet Readiness Security Assessment for a new application being deployed on the Internet. Recommended specific actions to remove or mitigate security exposures discovered during the engagement.

- An organization hosting an international sporting event. Performed firewall installations and configurations. Supported the firewalls 24/7 during the 21 day event.

- A large Internet Access and Content Hosting Provider. Conducted security assessment of access paths to over 600 servers. Recommended alternative configurations to restrict the access to these servers to only authorized system administrators. Conducted security assessment of SP2 architecture for use in content hosting multiple customers sites.

- A large insurance company deploying a web-based investment management system. Participated in an application security assessment including reviews of web servers, sql servers, middleware servers, and connectivity to mainframe legacy systems. Evaluated application against security "best practices". Conducted a firewall security assessment in preparation for the deployment of the web-based investment management system.

- A large printing company developing a web-based electronic catalog. Served as architect for a team of programmers in the development of this web-based application. The application implemented a secure electronic ordering system to be run by the customers of the printing company as a resale service. Application went into production 2Q97.

- A newly-formed Internet Service Provider. Setup operational capability using IBM RS/6000 Servers, Netsite Commerce Server software, Frame Relay, WAN, and Cisco Routers. Provided 24/7/52 operational support including backup and recovery, problem detection and correction, content development, and DNS and Sendmail administration.

- A long distance phone company developing a fraud detection system. Designed and managed the development of an application that analyzed call detail records for suspicious call activity. Used PowerBuilder and Sybase SQL Anywhere.

- A manufacturing plant developed a shop floor product tracking system. Developed a system to track the production of computer circuit boards in a highly automated manufacturing shop floor environment. Implemented using a client/server architecture with barcode scanning and printing capabilities.

- Performed numerous application development projects on IBM corporate Ledger, Accounts Payable, and Purchasing systems. Implemented on IBM Mainframes with DB2 and IMS databases.

Areas of technical expertise include:

- An in-depth knowledge of networking and telecommunications technologies including LAN, WAN, client/server, TCP/IP, NetBios, IPX, Novell, ISDN, Frame Relay, T1, Ethernet and Token Ring topologies.

- Experience in Internet Systems Administration including UNIX/AIX, RS/6000, DNS, FTP, Sendmail, World Wide Web (Netsite Commerce Server), backup and recovery.

- Experience in a wide variety of operating system environments including MVS, VM, OS/2, Windows, and UNIX. Programming languages have included C, Clarion, Easel, HTML, Optima, Pascal, PL/1, and PowerBuilder.

- Extensive experience with relational database technology. Knowledge of DB2 (all platforms), Sybase, and Watcom (Sybase SQL Anywhere).

Mr. Reinehr joined IBM as a programmer in 1988 after graduating from the University of Wisconsin at Madison with a Bachelor of Science degree in Computer Science. He was involved in numerous application development activities and attained a level of staff programmer prior to his departure from IBM in 1994. Mr. Reinehr left IBM to participate in the startup of an Internet Service Provider company based in Austin, Texas. He was responsible for setting up the operational capability for the new Internet service company. In early 1997, Mr. Reinehr rejoined IBM as a Consultant in the growing Internet and Notes Computing Practice. Mr. Reinehr joined the IBM Security and Privacy Services practice in March of 1998 after working on multiple Internet security engagements.

Emma Carrejo

PROFILE

Ms. Emma Carrejo is a Project Manager for IBM Global Services with over 18 years' experience in the information technology industry. She has worked extensively with small and medium size businesses, concentrating in marketing initiatives, technical training and support, and project management and implementation. She is recognized as a results-oriented team player with strong interpersonal skills and a strong sense of commitment and empowerment to achieve targeted objectives.

IBM EXPERIENCE

Ms. Carrejo has worked in a project manager capacity on various outsourcing projects. She managed a single-point-of-contact services contract in a complex customer environment, has been involved in re-engineering and business process development, has managed numerous projects involving system and software implementation, and has established strong customer and business partner relationships. She has eight years' experience working with the IBM AS/400 and has worked closely with IBM business partners to engineer marketing, support, and project implementation initiatives. She has cross-industry experience with major focus in the commercial and education sectors.

SUCCESSES

Ms. Carrejo was an IBM Project Manager for an IBM team involved in an outsourcing contract involving a $5 billion sale to a Fortune 500 company. Her team was part of a group responsible for the company-to-company transition of the business processes and systems. The team worked closely with both companies to review, evaluate, and establish business processes and to meet implementation timelines to ensure a smooth transition.

Ms. Carrejo established strong customer and business partner relationships while supporting over 200 installed midrange accounts. She teamed with IBM business partners in developing marketing and support initiatives and established turnkey marketing and implementation processes. She successfully installed and upgraded midrange products, consistently exceeding customer expectations. She received numerous performance and leadership awards which included Systems Engineering Regional Director and Systems Engineer of the Year.

Ms. Carrejo was project manager for a single-point-of-contact contract that provided help desk services to over 3000 workstation users throughout the country. She helped to transition the customer from a decentralized to a centralized MIS support structure. She managed a subcontractor who performed desk side services, and she also worked closely with the IBM and customer help desk delivery centers.

As a distribution industry specialist, Ms. Carrejo was a key player in marketing and implementing distribution industry solutions throughout West Texas and southern New Mexico. She played a major role in the marketing effort which increased market share by 40 percent. She also increased customer satisfaction by successfully implementing solutions and meeting critical implementation schedules. Ms. Carrejo was recognized as a leading distribution industry specialist in the country for two consecutive years.

OTHER EXPERIENCE

Ms. Carrejo worked as an IBM business partner for six years where she supported midrange accounts. She was responsible for performing all billable services, for project management and implementation, and for customer satisfaction. She also has taught classes at the local community college.

CREDENTIALS

Ms. Carrejo has a BBA from the University of Texas at El Paso. She completed the Dale Carnegie course on Public Speaking and Human Relations as well as numerous IBM marketing, technical, leadership, and project management classes. She served on IBM's Wholesale Distribution Advisory Committee and has served on committees with local school districts. She is fluent in Spanish.

Donald Ambrose

PROFILE

Mr. Ambrose is a Networking Consultant and Project Executive in the IBM Southwestern Area Infrastructure Technologies Services Practice, specializing in managing complex multi-vendor integration engagements. His primary technical competency has been data and voice networking with special emphasis in the development and rollout of advanced networking products and services. Mr. Ambrose also has extensive experience in managing and implementing Computer Telephony Integration, Integrated Voice Response Units, Automated Call Distribution and host mainframe connectivity.

PROFESSIONAL EXPERIENCE

Mr. Ambrose recently completed a year long effort managing the rollout of a data, Internet and voice network for a Northern New Mexico regional school district encompassing 32 schools over 5500 sq. miles. This project included developing the overall design, managing the various state and local government relationships and rolling out the cabling and network component infrastructures. The design approach included a backbone ATM network cloud that connected all thirty-two schools across the boundaries of three Local Exchange Carriers (LEC). This ATM backbone provides data and voice communications and is sufficiently robust to handle full-motion video and stable enough to provide voice transmission and distance learning.

As Project Executive and lead Project Manager of this effort, Mr. Ambrose implemented a new technology for this region working with US, State and local officials. The Implementation project (Phase II) included cabling each school facility and installing the networking equipment, servers, and PBX equipment. This project has been referenced as a success nationally and is listed as such in the US governments E-rate initiative campaign.

Mr. Ambrose was the Senior Project Manager for the development and rollout of a telephony billing system for a major aircraft company. This included all of the cell phones, pagers, and desktop telephones. All five companies within the corporation currently utilize these services, with offices located in forty-five states and the Caribbean.

As a Network Consultant, Mr. Ambrose was on a team that designed and implemented a private telephony network for the US Government. This $500M project provided a secure network of switched services across North America.

Other projects which Mr. Ambrose provided project management and technical consulting include:

- Developed the design and rolled out a network connecting 1600 sites across twelve Western States for a large power consortium. Transmission platforms included an ATM backbone running on OC12, OC3, and DS3.

- Developed the design of a $500M federal communications network, designed as a satellite backup to the current terrestrial system. This satellite network covers the entire fifty States and the Caribbean Territories.

- Led and managed an engineering team which designed and installed a four site, three State seamless Automated Call Distribution system. Including the IVRU and CTI for 500 agent positions. Upon turn-up, the call-center management realized a 37% efficiency gain.

OTHER EXPERIENCE

Prior to joining IBM, Mr. Ambrose was a Senior Engineering Manager for a major telecommunications company, which provides internet services, long distance, and local service in both the domestic and international markets. He has worked in the telecom industry for thirteen years, prior to joining IBM.

EDUCATION AND BACKGROUND

BS in Business Administration from American University, Washington DC.

US Patent Application 08,717,043; original design of "Switched Network Call Queuing with Enhanced Overflow Routing".

Founding member of the Dallas Area I.E.E.E. Telecommunications Networking Group

Author of two Engineering Technical Publications (MCIWorldcom internal) "Private Line Basics" and "Call Center Strategies"

Lynne O. Nicholson

BIO

Lynne is a public sector principal consultant in healthcare, education, and state & local government in IBM Global Services at IBM. She works complex deals in the public sector arena and is a regional resource as well. She has achieved marked success with over 30 years of high-productivity systems development including senior project, program, site, personnel, and technical leadership. Lynne has in-depth experience in:

- Software engineering,
- Software design, implementation,
- Quality assurance,
- Testing,
- Disaster recovery,
- IT process model
- Systems management
- Site, personnel & project management,
- Internet business planning, and marketing.

She has over 16 years of management and marketing experience increasing in responsibility, diversity and complexity.

Lynne has demonstrated her ability to pull it all together: client requirements, designs and resources in diverse environments to achieve mutual benefits, goals and viable solutions. Her experience base spans:

- Education
- Finance,
- Healthcare,
- Insurance,
- Federal, state and local governments,
- Military,
- Scientific laboratories,
- Distribution, manufacturing,
- Utilities and,
- Internet industries.

Lynne and her teams have created solutions on diverse platforms ranging from mainframes, minis to networks and the Internet. Lynne began marketing privately on the Internet in 1992, designed and fielded her first Internet store in 1995, and created a planning template for small to medium businesses to prepare them for being Internet enabled including business processes.

She was the project executive over the large Gallup McKinley County Schools e-Rate project that has just successfully completed after 6 months with the design, implementation, and installation of a state of the art network infrastructure to support distance learning and sharing in 32 schools in a remote, impoverished school district that spans over 5000 square miles.   The project completed on time and within budget despite significant challenges. Lynne has continued in a project exec role for additional contracts at Gallup McKinley County Schools to be completed over the next several months. Lynne is the coordinator of Area 10 ITS' efforts in testing and capacity planning for the Rocky Mountain and Houston area.

Prior to joining IBM, Lynne was a consulting principal in the Y2K remediation efforts at 6 different client accounts ranging from a National Laboratory to the financial, healthcare, and legal industries. She consulted both at the CEO level and IT managerial levels in risk mitigation, remediation processes, analysis, legal issues, quality assurance, embedded systems, project management, and financial impacts. Through her teams' and her work, 5 major Y2K events were detected and avoided, preventing over $6 million in loss and liabilities.

Ms. Nicholson began her Information Technology career with software development work in 1966 at Sandia National Laboratories working in the testing and evaluation organization. From 1966 through 1973, she concentrated on analysis, design development, testing and implementation of application systems for this major national laboratory. From there, Lynne took on the role of systems engineer for the largest county government in New Mexico while managing both hardware and software acquisitions. Ms. Nicholson put in place sound information technology processes including a structured design methodology to optimize work and mitigate risk at the County. For example, Lynne created put in place testing procedures, processes and systems for the Data Processing department Lynne was instrumental in the implementation of the county government's six online databases and imaging project as well as being a driving force in the flood disaster recovery project.

She was also responsible for all disaster recovery plans and led the disaster recovery team when the center was flooded. She setup and worked with field engineers to quickly design and implement a temporary computer facility which was operational in less than 3 weeks. Until the switchover to the temporary computer facility was affected, Ms. Nicholson coordinated the operations at three different computer sites to ensure that the

County Governments deliverables including payroll were met on time. Lynne put in place sound information technology processes to optimize work and mitigate risk at the County. For example, Lynne created put in place testing procedures, processes and systems for the Data Processing department.

From there, Lynne joined a private consulting firm to scope, install, prepare the sites, user documentation, customer training, migrate, and customization for turn key packages for city, county, and state government systems.

Ms. Nicholson then took on increasingly senior roles of responsibilities at the BDM Corporation. She managed several large software development and integration projects including one that was multi-site and required to go operational while still under development. That project started small at $1.8 million and expanded to 10.6 million under her oversight and management. In another project she was the program manager on a major hospital and kiting development and manufacturing application for the US Navy, creating 50 to 250 bed mobile hospitals. She led a tiger team effort to pinpoint the causes of $4 million overrun, discovered root causes, and created remediation scenarios and other alternatives. Lynne has managed teams with 65 staff members from such diverse backgrounds as educational, government, military, Information Technology, construction, scientific, medical, legal, and administrative,

In her career, Lynne has created major strategic partnering relationships with national and international firms such as Microsoft. With another consulting firm, Lynne was the program executive on a distributed software development effort. This effort was with Department of Finance & Administration for the State of New Mexico. She also provided expertise and resolution on Year 2000 issues to insure a successful financial system rollout for a system going to 125 agencies. A results producer, Lynne has facilitated resolution of information technology issues while balancing them against business initiatives, bottom lines, and goals.

Ms. Nicholson holds a M.S. in Electrical Engineering and Computer Science and University of New Mexico

B. S. in Mathematics, both from the University of New Mexico. Ms. Nicholson has received in-depth training in quality assurance, testing, systems engineering & management, and marketing. In 2000, Lynne recently received her e-commerce certificate from the Massachusetts Institute of Technology.

Appendix C – IBM Customer Agreement

IBM Customer Agreement

Thank you for doing business with us. We strive to provide you with high quality Products and Services. If, at any time, you have any questions or problems, or are not completely satisfied, please let us know. Our goal is to do our best for you.

This IBM Customer Agreement (called the "Agreement") covers business transactions you may do with us to purchase Machines, license Programs, and acquire Services.

This Agreement and its applicable Attachments and Transaction Documents are the complete agreement regarding these transactions, and replace any prior oral or written communications between us.

By signing below for our respective Enterprises, both of us agree to the terms of this Agreement. Once signed, 1) any reproduction of this Agreement, an Attachment, or Transaction Document made by reliable means (for example, photocopy or facsimile) is considered an original and 2) all Products and Services you order under this Agreement are subject to it.

Agreed to: (Enterprise name)	*Agreed to:* International Business Machines Corporation
By _____ Authorized signature	By _____ Authorized signature
Name (type or print):	Name (type or print):
Date:	Date:
Enterprise number:	Agreement number:
Enterprise address:	IBM address:

After signing, please return a copy of this Agreement to the "IBM address" shown above.

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